CLAIM AMENDMENTS

1. (Currently Amended) A traffic management processor for independently throttling the bandwidth of individual traffic flows to alleviate network congestion, comprising:

an instruction decoder having an input to receive a throttle control instruction identifying a flow identification (ID) of a particular traffic flow to be throttled in response to network congestion, and having an output to provide a throttle enable signal; ~~and~~

a departure time calculator (DTC) circuit coupled to the instruction decoder and having an input to receive the throttle enable signal and configured to calculate a departure time for the incoming packet in response to size and bandwidth parameters associated with the incoming packet, wherein the DTC circuit is configured to selectively adjust the bandwidth parameter by a bandwidth multiplier factor (BMF) in response to the throttle enable signal to selectively delay the departure time of the incoming packet;

a content addressable memory (CAM) device having a plurality of rows, each for storing the flow ID for a corresponding packet and a traffic type indicator (TTI) for the corresponding packet.

2. (Canceled)

3. (Currently Amended) The traffic management processor of Claim 1, wherein the throttle control instruction further comprises a specified traffic type indicator that indicates which type of traffic is to be throttled by selectively adjusting the packet departure times according to the BMF.

4. (Currently Amended) The traffic management processor of Claim 3, wherein the throttle control instruction further comprises a mode signal that can be set to a state that causes the DTC circuit to alter the ~~packet's~~ departure times of all packets to delay their transmission, regardless of the packet's flow ID or traffic type.

5. (Original) The traffic management processor of Claim 1, further comprising:

a departure time table coupled to the DTC circuit and having a plurality of rows, each for storing the departure time of a corresponding packet.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Currently Amended) A method for selectively throttling individual traffic flows, comprising:

receiving an incoming packet including a bandwidth multiplier factor (BMF) and a flow identification (ID), the flow ID indicating to which traffic flow the incoming packet belongs and the BMF indicating an amount by which packet transmission times are selectively altered to delay transmission of the packets;

receiving a throttle control instruction specifying which traffic flow is subject to throttling in response to network congestion, wherein the throttling is unrelated to an ingress policing of a service;

determining whether the incoming packet is part of the traffic flow specified by the throttle control instruction; and

selectively delaying transmission of the incoming packet in response to the determining, wherein the selectively delaying comprises:

receiving packet size and bandwidth parameters for the incoming packet; and

selectively multiplying the bandwidth parameter by the BMF in response to the determining to calculate a delayed transmission time for the incoming packet.

10. (Original) The method of Claim 9, wherein the determining comprises:

comparing a specified flow ID provided by the throttle control instruction with the flow ID from the incoming packet.

11. (Canceled)

12. (Original) The method of Claim 9, wherein the throttle control instruction further specifies which types of traffic are subject to throttling.

13. (Original) The method of Claim 12, further comprising:

ascertaining whether the incoming packet is of the traffic type specified in the throttle control instruction.

14. (Original) The method of Claim 13, wherein the ascertaining comprises:

comparing a traffic type indicator specified by the throttle control instruction with a traffic type indicator corresponding to the incoming packet.

15. (Currently Amended) A method for selectively throttling any number of traffic flows in response to network congestion, comprising:

receiving an incoming packet including a flow identification (ID), the flow ID indicating to which traffic flow the incoming packet belongs;

receiving a throttle control instruction including a specified flow ID indicating which traffic flow is subject to throttling;

comparing the specified flow ID with the incoming packet's flow ID to generate a throttle enable signal; and

selectively delaying transmission of the incoming packet in response to the throttle enable signal, wherein the selectively delaying comprises calculating a departure time for the incoming packet in response to size and bandwidth parameters corresponding to the incoming packet and in response to a bandwidth multiplier factor (BMF), wherein the BMF selectively delays the packet departure time independently of an ingress policing service.

16. (Canceled)

17. (Currently Amended) The method of Claim ~~16~~15, wherein the throttle control instruction further specifies which types of traffic are subject to throttling.

18. (Original) The method of Claim 17, further comprising:

determining whether the incoming packet is of the traffic type specified by the throttle control instruction; and

selectively asserting the throttle enable signal in response to the determining.

19. (Currently Amended) The traffic management processor of Claim 21, wherein each packet includes the BMF and the flow ID.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (New) A traffic management processor for selectively delaying transmission of individual traffic flows to alleviate network congestion, wherein each traffic flow includes a collection of related packets, the comprising:

an instruction decoder having an input to receive a throttle control instruction identifying one or more individual traffic flows to be delayed in response to network congestion, and having an output to provide a throttle enable signal;

a content addressable memory (CAM) device having a plurality of rows, each row for storing a flow identification (ID) for a corresponding packet and each row including a match line, wherein the flow ID indicates which traffic flow the corresponding packet belong to; and

a departure time calculator (DTC) circuit coupled to the instruction decoder, wherein the DTC circuit is configured to selectively adjust packet departure times by a bandwidth multiplier factor (BMF) to delay packet transmission in response to the throttle control instruction.

26. (New) The traffic management processor of Claim 25, further comprising:

match flag logic having inputs coupled to the rows of the CAM device and having an output to generate a match flag, wherein DTC circuit selectively adjusts the packet departure times in response to the match flag.

27. (New) The traffic management processor of Claim 26, wherein the match flag is generated in response to a comparison between a search key and the flow ID's stored in the CAM device.

28. (New) The traffic management processor of Claim 25, wherein instruction decoder is further configured to generate an enable all signal that causes the DTC circuit to alter the departure times of all packets, irrespective of which traffic flow or which traffic class the packets belong to.

29. (New) The traffic management processor of Claim 25, wherein the throttle control instruction further comprises a specified traffic type indicator (TTI) that indicates which type of traffic is to be throttled, and each row of the CAM device includes a TTI bit for the corresponding packet.

30. (New) The traffic management processor of Claim 25, wherein the throttle control instruction further comprises a mode signal that can be set to a state

that causes the DTC circuit to alter the packet's departure time, regardless of the packet's flow ID or traffic type.

31. (New) The traffic management processor of Claim 25, further comprising:

a departure time table coupled to the DTC circuit and having a plurality of rows, each row for storing the departure time of a corresponding packet and each row coupled to a corresponding row of the CAM device.